

**APPENDIX E**

**LAKE BELT LAND USE REPORT**



## LAKE BELT LAND USE REPORT

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## Introduction

During the 1992 legislative session, the Northwest Dade Freshwater Lake Plan Implementation Committee was created by the State Legislature to evaluate the South Florida Limestone Mining Coalition's proposal to excavate approximately 30,000 acres of freshwater wetlands in northwest Dade County. The US Army Corps of Engineers also extended an invitation to representatives of the governmental agencies participating in the Lake Belt Plan Implementation Committee to assist in the development of an Environmental Impact Statement for the proposed "Lake Belt Plan". The agencies identified the need to evaluate land use and to conduct several environmental studies, in order to properly assess the potential benefits and impacts which could result from implementation of the Coalition's proposed plan.

This report is the result of the land use planning evaluation, which was conducted by Metropolitan Dade County. The primary purposes of the report are to 1) identify ownership patterns, land use, zoning, and limestone quarrying permits in the Lake Belt area and 2) identify constraints and planning opportunities for consideration in the development of a future Lake Belt Plan. The information contained in this report is summarized according to the six geographical units: the C-9 Basin, the Transitional Northeast Everglades Basin, the Pennsuco Wetlands Basin, the North Trail Basin, the northwest four square miles of the Bird Drive Everglades Basin, and the lands south of Tamiami Trail and west of Krome Avenue. For each unit the following information is discussed: land use designation and zoning, land ownership and parcelization, existing land uses, land use conflicts and problems, potential future land use conflicts or issues, and recommendations.

## C-9 Basin

This is a part of the larger 98 square mile C-9 Basin which extends east to Biscayne Bay and north into Broward County. The approximately eleven square mile portion of the C-9 Basin that is included within the Lake Belt area is also called the Snake-Creek Basin in the Comprehensive Development Master Plan (CDMP) for Metropolitan Dade County. This area is located outside of the Urban Development Boundary and is designated as Open Land on the Land Use Plan Map in the CDMP. The land uses that may be approved in this area include rockmining and related uses, agriculture that requires no additional off-site drainage, rural residences at a density of one unit per five acres, necessary institutions and public facilities, utility and communication facilities and recreational uses. With the exception of four parcels that are zoned IU-3, BU-2 and BU-3, the area is zoned for agricultural or general use. Rockmining is an allowable use in either the general use or agricultural zoning category.

Consistent with the designated land use and zoning, this area is mainly used for rockmining and agricultural uses. Since 1984, DERM has issued ten rockmining permits to excavate 2,078 acres in the C-9 Basin. As of December of 1995,



approximately 710 acres were excavated. There are also several ancillary facilities such as an asphalt recycling plant, concrete-batching plants, a rock crushing plant and vehicle repair associated with the rockmining facilities.

Rockmining interests own or control about half of the total acreage in this basin. Most of the area that is owned by rockmining interests is in parcels that are greater than 160 acres. Dade County owns about 400 acres at the Opa Locka West Airport that is used for training and as a landing strip by Metro Dade Police Department. The State of Florida owns 438 acres in Section 5, Township 52 South, Range 40 East, (14) percent of the land in this Basin is publicly owned.

Agricultural uses in the C-9 Basin include cattle and goat grazing, horse stables, tree farming, sugarcane farming and several container nurseries. The 165 parcels with agricultural exemptions in the C-9 Basin range from two to 500 acres in size. All of the largest parcels with agricultural exemptions are owned by rockmining interests. The total acreage with agricultural exemptions is 4,691. The average agricultural exemption ranges from \$2,156 to \$59,576 per acre. The total value of agricultural exemptions compared to the assessed value for agricultural land is \$50,207,219/\$69,704,639. The total assessed value for land in the C-9 Basin is \$135,993,581, while the total assessed value for all of the parcels on the tax rolls in the Basin, including buildings, is \$142,543,051.

According to property tax records, there are 71 parcels with assessed building values. Of these, only eight have homestead exemptions, but an additional 17 are listed as structures with bedrooms and baths. The assessed building values for structures with homestead exemptions range from \$25,000 to \$138,000, but most are in the lower, rather than the higher end of the range. The total assessed value of the taxed structures in this basin is \$6,551,965.

Approximately 125 structures were observed on aerial photos taken in late 1995 or early 1996, however, it would require a detailed field survey to determine how many were merely storage sheds, or other minor ancillary structures. Legal uses include a pig slaughterhouse, a future cellular tower, the Opa Locka West landing strip, a paint testing facility, a cemetery and permitted cantinas. During routine field inspections, DERM staff have noted that there are several illegal cantinas, cock fighting rings, shanty towns and dump sites, primarily in the sections that border Okeechobee Road. DERM has 15 on-going enforcement cases in the C-9 Basin, mostly clustered in Sections 10, 11 and 13 of Township 52 South, Range 39 East. Most involve illegal filling of wetlands or dumping of solid waste.

### **Land Use Constraints and Planning Opportunities**

The major land use issues in this basin center around the rural, "third world" atmosphere of the sections immediately northeast of US 27. The section and half section line roads that exist are paved, but many local roads are not. In places they are deeply rutted and lined with illegally dumped solid waste. Shanty towns are prevalent



and frequently surrounded by high walls constructed right at the roadway, or pavement edge. Illegal dumping is rampant and adequate enforcement is beyond DERM's and the Solid Waste Department's current enforcement capabilities.

The location of residential uses and cantinas in proximity to rockmining is incompatible since those uses are constantly subjected to the noise, shaking and dust of truck traffic and blasting. There are also some legal uses, such as a pig slaughterhouse, and several illegal uses, such as cock fighting rings, that are incompatible with most other uses except rockmining and agriculture.

Most of the future potential land use issues and constraints in this area will depend on how the Miami Canal (C-6) and the Snake Creek Canal (C-9) are managed. Raising water levels in C-6 or C-9 may impact the economic viability of many of the agricultural land uses in the area such as tree farms, field nurseries and marginal agricultural uses, such as grazing. This could lead to pressure to convert those lands into rockmining lakes, or into more urban business, industrial or residential uses.

Another potential future scenario could be to use some of these lands as water management/retention areas where water could be backpumped and cleansed prior to discharge into the Transitional NE Everglades, west of the Turnpike, or into Water Conservation Area 3B. The former "Blockbuster" site in the NE corner of the C-9 Basin has been identified as a potential stormwater treatment area (STA). The Opa Locka West airstrip could also be used for stormwater management or appropriate portions could be sold for rockmining if it is no longer needed by the Aviation Department. Unless it is determined to be surplus property, the airstrip, along with the major highways and paved roads, the cemetery adjacent to US 27, and the White Rock plant in Section 12 will constrain the shape of the lakes that may be created and the height at which canal and groundwater stages may be safely maintained.

There could be a potential problem for seepage control if the western portion of the Opa Locka airstrip and the parcel to the south of it in Section 3, which is already permitted for rockmining, are excavated. Computer modeling conducted by the South Florida Water Management District has shown that excavation within one mile of the L-30 Levee will exacerbate the existing problem of groundwater seepage out of Water Conservation Area 3-B.

During the SFWMD's charette on the C-9 Basin in August 1994, the C-9 Basin was also viewed as an area where active water oriented recreation and ecotourism might be promoted in the future. The potential for active recreational uses in this basin was reiterated during the Lake Belt workshop on August 28, 1995.



## **Recommendations**

- \* Appropriate Departments within Dade County, FDEP, SFWMD and the Corps should do a coordinated code enforcement sweep of Sections 10, 11, 13 and 14 of Township 52 South, Range 39 East.
- \* Metro-Dade should keep this area as an Open Land buffer for the urban development to the east. It should be used primarily for water retention, backpumping and water storage with compatible recreational uses. Future development in this area should be limited to structures that are designed to accommodate elevated groundwater stages or extended hydroperiods.
- \* This area should remain outside of the Urban Development Boundary (UDB). Dade County should retain the provisions of the CDMP and Section 2-116.2.1. of the County Code that govern land uses outside of the UDB in incorporated and unincorporated areas.

## **Transitional Northeast Everglades Basin**

The largest segment of the Lake Belt is the Transitional Northeast Everglades (TNE) Basin, or Northwest Wellfield Open Land Subarea as it is called in the CDMP. Since this area is located outside of the Urban Development Boundary, the land uses that may be considered in this 33 square mile area are rockmining and ancillary uses, necessary public institutional uses, utility and communication facilities, agriculture that requires no additional off-site drainage and rural residences at a maximum density of one dwelling unit per five acres. Most of this area is undeveloped and zoned for general or interim use (GU). About four square miles in the northern part of the TNE are zoned for agriculture. All of these sections are owned by rockmining companies, but only about 320 acres are being used for agriculture (i.e. grazing). There are three parcels zoned for industrial uses in the TNE; two of which are on lands owned by Rinker. The third is a vacant 15 acre parcel in the extreme SE corner of Section 36, Township 53 South, Range 39 East. The dominant existing land uses are rockmining and ancillary uses such as a cement mill, concrete-batching plants, a concrete block plant, a pre-cast facility, rock crushing plants and vehicle repair facilities.

Major non-rockmining uses in this area are the Northwest Wellfield and wellfield conveyance canal, a Florida Power & Light substation and 500kv transmission line, the South Florida Reception Center and the Metro West Detention Center on NW 41st Street, and two railroad spurs. Other non-rockmining uses include a radio tower, plant nurseries, a fat rendering plant and the remnants of a shanty town in Section 36 of Township 53 South, Range 39 East.

According to the property tax records, there are 12 parcels with assessed building values. None have homestead exemptions, but four are listed as structures with bedrooms and baths. The total assessed value of the taxed structures in this basin is \$2,012,243.



There are 26 parcels with agricultural exemptions in the TNE, but there are only 348 acres in agriculture. Agricultural exemptions range from \$11,584 to \$18,153 per acre. The total value of agricultural exemptions compared to the total assessed value for agricultural lands is \$5,322,434 / \$5,754,860. The total assessed land value in the TNE Basin is \$24,005,350, while the total assessed value for all parcels on the tax roles in the Basin, including buildings, is \$31,090,786.

Rockmining interests own or control about 26 square miles, or 61 percent of the TNE. Dade County and the State of Florida own about six square miles: three square miles at the NW Wellfield, most of Section 27, Township 53 South, Range 39 East where the state prison and county jail are located and Section 16, Township 52, Range 39 East in the NW corner of the TNE where M.E. Thompson Park is located. The State also owns scattered parcels in Sections 3, 9 and 15 in Township 53 South, Range 39 East. All of the private lands that are not owned by rockmining companies are relatively small in size, ranging from less than one acre in Sections 3, 9, 24 and 35 of Township 53 South, Range 39 East to 640 acres in Section 16 of Township 53 South, Range 39 East. Most private tracts are ten to 20 acres.

DERM has 13 on-going enforcement cases in the TNE Basin, mostly clustered in Sections 24, 35 and 36 of Township 53 South, Range 39 East. Most involve illegal filling of wetlands or dumping of solid waste.

Since 1984, DERM has issued 37 permits to dredge or fill wetlands in this basin. Of the approximately 17,000 acres owned by rockmining interests in the TNE, DERM has issued permits to excavate 4,409 acres of which approximately 1,812 acres have been excavated. In 1995 there were 4,240 acres of lakes in the TNE. There will be approximately 7,000 acres of rockmined lakes when all of the lakes currently permitted by DERM are mined out.

### **Land Use Constraints and Planning Opportunities**

The ultimate configuration of the rockmining lakes and future ground water levels in the TNE are constrained by the major facilities, utilities and infrastructure that are located in this basin. These include the two prisons, the NW Wellfield and pipeline, four mitigation areas, a cement mill, two concrete plants, the FPL substation, the existing and proposed transmission lines, rail lines, the Florida Turnpike, Okeechobee Road, NW 41st Street and NW 58th Street. Most of these facilities represent large capital outlays and are fixed features that cannot easily be relocated.

The majority of the lands in the Transitional Northeast Everglades Basin are located within the wellfield protection area of the Northwest Wellfield. The wellfield is comprised of 15 wells, which collectively pump an average of 90 million gallons of water per day. Together with the Hialeah/Preston Wellfield, the Northwest Wellfield supplies drinking water to most of the residents and businesses in Dade County north of Flagler Street.



In 1985, Dade County established a protection program for the Northwest Wellfield, which includes restrictions on land uses, septic tank loading, stormwater discharges, and the use, handling or disposal of hazardous materials and hazardous wastes. The interior portions of the wellfield protection area are based upon the average amount of time it would take for a contaminant in the ground water to reach the wellheads. Restrictions increase as the travel time decreases (i.e., the closer to the wellheads, the more restrictive the regulations.) The outer limit of the wellfield protection area is expressed as the point where the groundwater in the aquifer would be drawn down by a quarter of a foot if the wellfield were pumping 220 million gallons of water per day after an extended drought period.

The Northwest Wellfield serves as a constraint to the development of a Lake Belt Plan due to the necessity to protect the water quality of the drinking water for Dade County residents. While rockmining is exempt from most of the wellfield protection restrictions, a setback from the wellheads exists in which rockmining is prohibited. Additionally, the wellfield protection program was based primarily upon the concern for inorganic and organic chemicals in groundwater contaminating the wellfield. The County is currently assessing the adequacy of the program for protecting the wellfield from microbial contaminants that are primarily a surface water concern.

One of the original tenets of the rockmining industry's lake plan proposal was that the many thousands of acres of lakes in northwest Dade County could provide a wide range of recreational opportunities for the citizens of south Florida. While this concept may be particularly valid in the C-9 Basin, it must be approached with caution in the TNE, because of the need to protect the NW Wellfield. There has been a general consensus among members of the Lake Belt Implementation Committee that this area should be reserved for passive, non-motorized recreational opportunities and that access into this area should be very carefully controlled.

A noteworthy issue that will affect the perspective use of this area for recreational development relates to the design of the lakes, shoreline areas and residual upland and wetland areas. The attractiveness of the quarry lakes and surroundings for recreational activities will be determined in large measure by the aesthetic qualities and fish and wildlife values, or lack thereof, remaining in this area after the excavation activity.

During the past four years, a general consensus has developed that all of the lands east of the FPL right-of-way (approximately N.W. 147 Avenue) could be rockmined, and a majority of the members of the Lake Belt Implementation Committee have also suggested that most of the lands east of the Dade-Broward levee (approximately N.W. 157 Avenue) may also be mined. While the degree to which the strip should be mined remains a controversial issue, which will need further evaluation in the C&SF Restudy, the Implementation Committee has recognized the need to consolidate parcels that are not currently owned by rockmining companies in order to facilitate the efficient mining of the TNE.



The proximity of lands in the SE corner of the TNE to urban development causes several conflicts. The developed areas to the south are subject to noise and shaking from blasting and the almost constant noise and dust from truck traffic. Although blasting permits can be issued for rockmining within 2,000 feet of existing residential development and closer, if mining companies are willing to decrease the strength of blasting materials used, there should be some buffer use established in the southern portions of Sections 35 and 36 of Township 53 South, Range 39 East between the rockmining and the residential developments to the south.

The proximity of urban development to the unmined portions of the southern TNE also creates a situation where illegal dumping ATV traffic and other activities like target shooting, paint ball and car stripping are problems, because of the relatively easy and uncontrolled access from NW 12 Street. While large areas of the shanty town in Section 36 have been burned or cleared, there are still several sites with probable code violations in Sections 35 and 36.

### **Recommendations**

- \* Appropriate Departments within Dade County, FDEP, SFWMD and the Corps should do a coordinated code enforcement sweep of Sections 24, 35 and 36 of Township 53 South, Range 39 East.
- \* With the exception of lands in the southern portions of section 35 and 36, Metro Dade County should keep this area as Open Land buffer for the urban development to the east. Once mined, it should be used primarily for water retention and water storage.
- \* Parcels of land that are not owned by rockmining companies should be consolidated to facilitate efficient mining in the TNE. This should include parcels in Sections 24, 35 and 36. The lands in Sections 24, and the northern portions of Sections 35 and 36 should be used for rockmining. The assembled lands in the southern portions of sections 35 and 36 should preferentially be used as parklands to provide recreational opportunities for the rapidly developing areas of western Dade County. Once all private lands in this area have been acquired, access from NW 12th Street should be carefully controlled and there should be no through north-south access between NW 12 and NW 25 Streets in Sections 35 or 36.
- \* If it is determined during Phase 2 of the Lake Belt Planning that it is not feasible to create a parkland buffer or recreational development in Sections 35 and 36, then Metro-Dade should evaluate potential alternative uses, such as restricted industrial and office parks, for the lands in the southern portion of these Sections to provide a buffer between the rockmined area to the north and the developed area in the North Trail Basin



\* Within the NW Wellfield Protection Area, access should be carefully controlled. When mining activities are concluded, access roads should be removed. Roads that must remain to provide access to other uses should be aligned to eliminate direct access to the lakes, and the perimeter of lakes, which might be potentially accessed should be bermed to reduce the potential for dumping into the lakes.

\* Metro-Dade County should continue to evaluate the effectiveness of the protection program for the Northwest Wellfield.

### **North Trail Basin**

The smallest segment of the Lake Belt is the western portion of the North Trail Basin (NTB). The lands bordering the western side of NW 137 Avenue are within the Urban Development Boundary and designated for restricted industrial and office use on the CDMP Land Use Plan Map. The remainder of the area is part of Open Land Subarea 3, which is referred to as the Tamiami-Bird Canal Basins in the CDMP. The land uses that may be considered for approval in this 2+ square mile area are essentially the same as those listed for the C-9 Basin.

Most of the western NTB is undeveloped and zoned for general, or interim use (GU). One 250 acre parcel located west of NW 137 Avenue in Section 3, Township 54 South, Range 39 East is zoned for Agriculture, and two parcels on the west side of NW 137 Avenue in the same Section are zoned and used for legally non-conforming industrial uses. There is currently no rockmining in the NTB.

According to the property tax records, there are nine parcels with assessed building values. None of those have homestead exemptions, bedrooms or baths. The total assessed value of the taxed structures in this basin is \$ 517,029.

The one agriculturally zoned parcel is a tree farm that has an agricultural exemption of \$2,274 per acre, for a total exemption of \$569,190. The total assessed land value in the North Trail Basin is \$17,570,903 while the total assessed value for all parcels on the tax roles in the basin, including buildings, is \$18,087,932.

There are no parcels owned by rockmining companies in this part of the NTB. With the exception of Government Lot 4, which is owned by the State of Florida and the southern half of Government Lot 3, most of the land is divided into small parcels. Approximately seventy-five percent of the land in this part of the NTB is in private ownership.

DERM has had enforcement actions against the owners of several properties along the western side of NW 137 Avenue since 1986. They are operating industrial facilities served by septic tanks and on-site wells, which is not allowed under County code. They also illegally filled their properties and do not have adequate on-site stormwater management. In late 1996, the owners of these properties applied for industrial zoning, but they had not submitted plans to correct the violations on these



properties. DERM currently has a total of 14 enforcement cases in the NTB. Since 1984, DERM has issued 15 permits to fill or excavate wetlands in this Basin.

### **Land Use Constraints and Planning Opportunities**

This area serves as a wetland buffer between the largely undeveloped lands to the north and west and the rapidly urbanizing lands to the south and east. Direct access into the area is provided by the bridge across the Tamiami Canal at NW 137 Avenue, but is otherwise very limited.

The proximity of lands in the western NTB to urban development causes constraints, but also provides some unique planning opportunities. As with the southern TNE, it will either be necessary to limit blasting within 2,000 feet of residential areas or to provide a suitable land use buffer, if rockmining is to be extended into this area. A restricted industrial and office designation west of NW 137 Avenue could provide for suitable buffer land uses if carefully regulated. This category is generally used where facilities need to conform with special groundwater protection regulations within wellfield protection areas. Development is generally limited to office uses, but some business, manufacturing and warehouse uses may also be permitted, provided that potentially hazardous uses are avoided and best management practices are used. The southern portion of this area along the Tamiami Trail and Canal is located within the protection area for the West Wellfield.

Future uses in this area may also be impacted by the operation of the Tamiami Canal. If higher water levels are maintained or the duration of high water stages is increased, development in this basin could be further constrained by fill and stormwater management requirements.

Government Lots 3 or 4, or the northern portions of Sections 3 and 4 of Township 54 South, Range 39 East are outside of either the Northwest Wellfield, or the West Wellfield Protection Area. If rockmining is permitted in this area, the resulting lakes would be within a mile of the urbanized areas to the east of NW 137 Avenue and south of the Tamiami Trail. This could provide an opportunity for the development of a regional, water oriented park.

### **Recommendations**

\* If it is concluded that Government Lot 4 should be mined, its transfer to mining interests and mining should be expedited in order to minimize future land use conflicts with the residentially developing areas to the south.

\* If the expedited transfer and mining of Government Lot 4 is successful, Metro-Dade should explore the feasibility of creating a regional water oriented park in this area after the quarrying is completed.



\* Metro-Dade should keep the western portion of this area as an Open Land buffer for the urban development to the east and south. It should be used primarily for water retention and water storage with compatible park and recreational uses.

\* If, during Phase 2 of the Lake Belt Plan, it is determined that is not feasible to create a parkland buffer, then Metro-Dade should evaluate potential alternative uses, such as restricted office and industrial parks, for the lands in the portions of Sections 3 and 4 of Township 54 South, Range 39 East north of the Tamiami Trail and Government Lot 3 adjacent to NW 137 Avenue. Such alternative uses could provide a buffer between the rockmined area to the north and the developed areas to the south in the Bird Drive Basin and to the east in the North Trail Basin.

### **Bird Drive Everglades Basin**

The northwest four and one half square miles of the Bird Drive Everglades Basin (BDEB) are included in the Lake Belt area. Like the NTB, this is part of Open Land Subarea 3, Tamiami-Bird Canal Basins in the CDMP. The land uses that may be considered in this area are essentially the same as those listed for the C-9 Basin. Most of this area is undeveloped and zoned for general or interim use (GU). One six acre parcel located at the junction of Krome Avenue and the Tamiami Trail in Section 06, Township 54 South, Range 39 East is zoned BU-3 and used for a fast food/truck stop.

According to the property tax records, there are six parcels with assessed building value. None have homestead exemptions, but one is listed as having two bedrooms and two baths. The total assessed value of the taxed structures in this basin is \$447,834.

There are agricultural exemptions on 24 tracts of land in this basin. The total agricultural exemption value compared to total value for agricultural land in the BDEB is \$3,862,674/\$4,318,860. The total assessed land value in the BDEB Basin is \$32,543,738, while the total assessed value for all parcels on the tax roles in the basin, including buildings, is \$32,991,572.

Six of the tracts with agricultural exemptions are in Section 5, however, no wetland permits have been issued for agricultural use in Section 5. These six tracts are all listed as having Environmentally Endangered Lands (EEL) covenants, which means that the owners have agreed to preserve these lands for a minimum of ten years. There are 21 other parcels with EEL covenants on 370 acres in the northwestern part of the BDEB.

There are no parcels owned by rockmining companies in this part of the BDEB. With the exception of some 40 acre and one 80 acre parcel in Section 08, Township 54 South, Range 39 East and an old subdivision in Section 17, Township 54 South, Range East, most of the parcels in this area are five to ten acres in size. There are over 1,200 individual parcels in Section 17. Ninety-eight percent of the land in this part of the BDEB is privately owned.



Since 1984, DERM has issued 26 permits to fill or excavate wetlands in the Bird Drive Basin, but none were for properties located in the northwestern four and one half square miles. There is one pending application to fill 6.2 acres in Section 6, Township 54 South, Range 39 East in the southeast corner of the intersection of Tamiami Trail and Krome Avenue. DERM has one enforcement case in Section 18, Township 54 South, Range 39 East for filling wetlands with solid waste.

#### **Land Use Constraints and Planning Opportunities**

Land uses in this area are presently constrained by the fact that this is a flood prone, low lying area that is outside of the County's designated urban expansion area. Access is generally limited to trucks, four wheel drive and all terrain vehicles. During the dry season the area is plagued by dumping, ATV use, shooting, paint ball, car stripping and other illegal uses.

Like the NTB, this area may become wetter and more flood prone if currently contemplated plans to increase water stages in the Water Conservation Areas to the west are successfully implemented. The entire four and one half square mile area is within the protection area for the County's West Wellfield.

During 1994-5, Dade County explored the possibility of using the northwest part of the Bird Drive Basin for stormwater retention. However, the difficulty of buying more than 1,200 parcels of land in Section 17, Township 54 South, Range 39 East and the costs of conveying water from the developing areas to the south and east made that option not economically feasible in 1995. However, since that time several private developers have approached the County with plans to acquire parcels in Section 17 to provide stormwater management for selected parcels in the developing portions of the Bird Drive Basin to the east.

Together with all of the lands previously described in the C-9, TNE and NTB Basins, this portion of the Bird Drive Everglades Basin is within both the Water Preserve Areas that have been identified by the National Audubon Society and the East Coast Buffer areas as defined by the South Florida Water Management District. Therefore, its long term potential as a wetland/water preserve area will continue to be evaluated through the C&SF Restudy process.



### **Recommendations**

- \* As part of the mitigation for rockmining elsewhere in the Lake Belt, this area should be acquired and managed as a wetland/water reserve, or for purposes as further defined in the C&SF Restudy process.
- \* In the short term, the County should review the use of EEL Covenants in this area to determine whether the owners should be required to remove the Melaleuca from their land and keep it Melaleuca free in order to maintain their EEL Covenants.
- \* The County should review the use of agricultural exemptions in this area.

### **Pennsuco Wetlands Basin**

The Pennsuco Wetlands Basin, called the Dade-Broward Levee Basin in the CDMP, covers more than 20 square miles between the Dade-Broward Levee and Krome Avenue. Unlike the other basins in the Lake Belt, all of this area is designated for Environmental Protection in the CDMP. Therefore, new uses that may be permitted are limited to rural residences at a density of one unit per five acres, low-coverage communications facilities, recreational facilities, and necessary public facilities, including water management facilities. With the exception of the southeastern portions of Sections 17 and 19, Township 52 South, Range 39 East, which are zoned for agriculture, the rest of this Basin is zoned GU for general or interim use.

According to the property tax records, there are two parcels with assessed building values. Both are used for antenna fields and neither has a homestead exemption, bedrooms or baths. The total assessed value of the taxed structures in this basin is \$ 500,528.

There are three parcels with agricultural exemptions of \$900 per acre, but there are only 31.5 acres in agriculture. The total value of agricultural exemptions compared to the total assessed value for agricultural lands is \$26,359/\$31,510. The total assessed land value in the Pennsuco Wetlands Basin is \$2,023,028, while the total assessed value for all parcels on the tax roles in the basin, including buildings, is \$2,523,556.

There are about two and one half square miles of land in government ownership and about six square miles owned by rockmining companies in the Pennsuco. All of the government and rockmining lands are in relatively large parcels, as are most of the remaining privately owned lands in this Basin. However, about three square miles in private ownership are subdivided into five and ten acre parcels. Sixty percent of this Basin is in private ownership.

Since 1984, DERM has issued two permits to fill wetlands in the Pennsuco wetlands for antenna facilities. An additional permit was issued to excavate the NW Wellfield. DERM has two active enforcement cases in this area.



### **Land Use Constraints and Planning Opportunities**

Throughout the Lake Belt, Lower East Coast Water Supply, East Coast Buffer and Water Preserve Area planning processes, a general consensus has developed that the Pennsuco should be acquired, managed and maintained as a wetland/water preserve area. It is recognized as an important area for controlling seepage from Water Conservation Area 3B. The South Florida Water Management District has emphasized the need to maintain the wetlands and peat soils in this area for hydrologic purposes, as well as for their inherent wetland and wildlife values.

The Dade-Broward Levee, which extends from Krome Avenue to the Tamiami Trail, offers many potential planning opportunities. During the Lake Belt Workshop in August of 1995, the levee was recognized as a potential location for the high speed rail, but was also seen as an ideal location for passive recreational opportunities, such as hiking and biking, provided that access from the levee into the Pennsuco or the TNE was carefully controlled. The opportunity exists to link the County's M.E. Thompson Park in the northern part of the TNE with a park in the southern NTB in Section 4, Township 54 South, Range 39 East.

The County's Trail Glades Range in the SW corner of the Pennsuco presents other potential opportunities and constraints. It is heavily used by Metro Dade Police Department and others for target practice. The surrounding dense stand of Melaleuca provides an excellent sound and visual buffer, but it also is a major seed source for this exotic pest plant. Removal of these trees within the gun range may be very problematical and costly, because of the lead and the need for an adequate buffer around this facility.

### **Recommendations**

- \* Priority should be placed on land acquisition or land swaps to facilitate public ownership of the lands in this Basin and for consolidation of rockmining holdings in the TNE.
- \* This area should be acquired as part of the mitigation for rockmining elsewhere in the Lake Belt. It should be managed as a wetland/water preserve area.
- \* The potential for creating a hiking/biking/riding trail along the Dade-Broward Levee should be evaluated during Phase 2 of the Lake Belt Implementation Process. This should include potential linkages to existing and future parklands, mitigation areas and other physical features such as the old Pennsuco canal.

### **Lands West of Krome**

There are ten square miles south of the Tamiami Trail and west of Krome Avenue that are included within the Lake Belt planning area. The area designated Everglades National Park Expansion Area is included in this discussion on the Lands



West of Krome. Like the North Trail and Bird Drive Everglades Basins, the eastern portion of this area is part of Open Land Subarea 3, Tamiami-Bird Canal Basins in the CDM. Therefore, land uses that may be considered are essentially the same as those listed for the C-9 Basin. New uses that may be permitted are limited to rural residences at a density of one unit per five acres, low-coverage communications facilities, recreational facilities, and necessary public facilities, including water management facilities. All of this area is zoned GU for general or interim use.

The five square miles west of Levee 31N are designated for Environmental Protection in the CDM. These lands lie within the authorized expansion area of Everglades National Park. Land uses in this area are regulated by the County's East Everglades Area of Critical Concern program and regulations. Allowable land use density in this area is one dwelling unit per 40 acres.

The analysis, which follows, refers only to the five square miles east of Levee 31N and west of Krome Avenue, because uses are very restricted west of the levee. According to the property tax records, there are five parcels with assessed building value. None have homestead exemptions, bedrooms or baths. The total assessed value of the taxed structures in this basin is \$3,076,447. Most of the buildings in this area are tax exempt governmental facilities such as the Krome Detention Center, the Everglades Correctional Facility and Dade County jail (under construction), the Miccosukee Tribe Smoke Shop, an FAA Doppler Radar facility, and the U.S. Army NCS antenna facility.

There are agricultural exemptions on four tracts of land in Section 25 and 36. The total value of agricultural exemptions compared to the total assessed value for agricultural lands is \$6,064,600/\$29,052,744. The total assessed land value for the five sections east of Levee 31N in this basin is \$34,896,306, while the total assessed value for all parcels on the tax roles in the same area, including buildings, is \$35,610,737.

Three of the five square miles of land in the area east of Levee 31-N are owned by rockmining companies. As of 1996, 403 acres had been mined in Sections 24, 35, and 36, Township 54 South, Range 38 East.

Since 1984, DERM has issued five permits to fill wetlands in this area. DERM currently has two active enforcement cases in this area.

### **Land Use Constraints and Planning Opportunities**

Future land uses and groundwater levels in this area may be constrained by major facilities and infrastructure, including a prison, a Dade County Jail, the Krome Detention Center, a cement plant, the CSX rail line and Krome Avenue. Most of these facilities represent large capital outlays and are fixed features that cannot easily be relocated.

The proximity of rockmining to the L-31N canal in the eastern half of this area may constrain the ability to control seepage out of Everglades National Park. Computer



modeling performed by the South Florida Water Management District has shown that rockmining within one mile of a canal significantly increases seepage out of natural areas. Lakes have been excavated in the southern two square miles and the lake in the southernmost section is located within approximately 700 feet of the canal.

The portion of this area east of the L-31N canal is located within the wellfield protection area of the West Wellfield. The wellfield is comprised of three wells and has a total installed capacity of 30 mgd and a planned second phase of an additional 30 mgd. Currently the wellfield is permitted to withdraw a maximum of 15 mgd. Additionally, the County is in the process of installing three aquifer, storage and recovery wells at the West Wellfield, which would pump Biscayne aquifer water into the Floridan aquifer for storage and later withdrawal.

As discussed in the Transitional Northeast Everglades Basin section regarding the Northwest Wellfield, the West Wellfield serves as a constraint to the development of a Lake Belt Plan due to the necessity to protect the quality of drinking water supplied to Dade County residents. The protection program for the West Wellfield is the same as that which exists for the Northwest Wellfield and, therefore, requires assessment to determine its adequacy for protecting the wellfield from microbial contaminants which are primarily a surface water concern.

#### **Recommendations**

- \* No rockmining should be allowed in lands west of Levee 31-N. Land uses west of the levee should be consistent with the Environmental Protection designation in the CDMP and the East Everglades Zoning Overlay Ordinance
- \* Applications for additional rockmining in the area west of Krome Avenue and east of Levee 31-N should be thoroughly evaluated to determine their potential impacts on groundwater seepage out of the NE Shark River Slough.
- \* The area east of Levee 31-N should remain as an Open Land buffer between Everglades National Park and the Bird Drive Everglades Basin. Future land uses in this area should be consistent with the West Wellfield Protection regulations. They should also be designed to be compatible with the existing institutional uses and to accommodate increased groundwater levels and hydroperiods.

